Washington's Drinking Water Program:

Recommendations Regarding Scope and Funding

A Report to the Washington State Department of Health

July 2000

DOH PUB #331-188

WASHINGTON
WATER SUPPLY ADVISORY COMMITTEE

July 14, 2000

Mary C. Selecky, Secretary
Washington State Department of Health
P.O. Box 47890
Olympia, WA 98504-7890

Dear Secretary Selecky:

I am pleased to provide you with a summary of the Washington Water Supply Advisory Committee's recommendations regarding the scope and funding of the state's drinking water regulatory system. Our recommendations include reallocating existing resources, as well as seeking new resources and authority for state and local drinking water programs.

This report represents nearly a year's work by the committee. While the diversity of our perspectives occasionally led to spirited discussions, we easily reached consensus on one thing–the need for additional resources. Without adequate and stable funding for state and local drinking water programs, the state's public health system is increasingly limited in its ability to assure safe, reliable drinking water for the citizens of Washington.

This is the third stakeholder review of the state's drinking water system in the past six years. Although the Legislature has approved some changes from previous efforts, it has not provided any major state funding for the state's program.

As described inside, our recommendations include an immediate increase of $3.8 million annually to the state Department of Health and local health jurisdictions. Other significant recommendations include:

- Modifying regulations regarding Group B water systems, providing on-going oversight only for systems designed to serve five or more connections.
- Making other statutory and rule changes that create stronger links to the sale of property, land use decisions, and other processes that have ties to safe drinking water.
- Increasing focus on improved communication, training and technical assistance, particularly to small Group A water systems.

Many of the committee's recommendations describe changes in direction or priority for existing resources and do not have additional costs or statutory modifications associated with them. Your staff in the Division of Drinking Water have demonstrated a commitment to using the committee's guidance in these cases. Without adequate, stable funding, however, the long-term viability of the state and local drinking water regulatory system will increasingly come under question.

I hope you will join us in supporting our vision for a public health system that assures safe, reliable drinking water for the citizens of Washington. Please contact me or other committee members if we can provide additional information.

Sincerely,

Greg Brizendine
Chair, Washington Water Supply Advisory Committee
Manager, East Wenatchee Water District

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The Water Supply Advisory Committee (WSAC) was formed by the Legislature in 1995 (RCW 70.119A.160). The Legislature directed the WSAC to "provide advice to the department on the organization, functions, service delivery methods, and funding of the drinking water program." The WSAC represents a range of drinking water interests - including utility owners and operators, consumers and environmental advocates – and advises the Washington State Department of Health in its mission to protect the health of Washington citizens by assuring safe, reliable drinking water.

Executive Committee

Greg Brizendine, Chair
Skip Richards, Vice Chair
Gene Eckhardt
Bob Hammond
John Kounts
Gary Rhoades
Judy Turpin

Scope and Funding - Committee Participants

Greg Brizendine, E. Wenatchee Water District
Bob Hammond, City of Kennewick
Cas Hancock, Hancock and Associates
Julie Hutchins, Seattle Public Utilities
John Kounts, Washington PUD Association
Alan Medak, Tacoma Water Department
Drew Noble
Clair Olivers, City of Everett Public Works
Lorna Parent, Skagit County Health
Gary Rhoades, Evergreen Rural Water of WA
Skip Richards, WA Associated Water Systems
Denise D. Smith, League of Women Voters
Judy Turpin, WA Environmental Council
Pat Wiles, Washington Water Services

WSAC Committee Members

Robin Bennett, Boeing

Ben Bonkowski, Department of Ecology

Greg Brizendine, E. Wenatchee Water District

Walter M. Canter, WA Association of Sewer & Water Districts (WASWD)

The Honorable Gary Chandler, WA State Representative

Mike Cox, Drinking Water -EPA Region 10

The Honorable Darlene Fairley, WA State Senator

Martin Faveluke,Manufactured Housing Communities of WA

Ralph Ferguson

Judi Gladstone, Seattle Public Utilities

Bob Hammond, City of Kennewick

Keith Higman, Island County Health Department

John Kounts, Washington PUD Association

Alan Medak, Tacoma Water Department

Clair Olivers, City of Everett Public Works

Paul Parker, WA State Association of CO

Chris Parsons, Dept. of Community, Trade & Economic Development

The Honorable Debbie Regala, WA State Representative

Gary Rhoades, Evergreen Rural Water of WA

Skip Richards, WA Associated Water Systems

John Robischon, South Sound Utility Company

Denise D. Smith, League of Women Voters

Mark Tompkins, San Juan County Health & Comm Services

Judy Turpin, WA Environmental Council

The Honorable Jim Wall, Commissioner, Chelan CO PUD

Jack Watkins, Jr., Montgomery Watson

The Honorable Jim West, WA State Senator

Dave Williams, Association of WA Cities

Introduction

At the request of the state Department of Health, the Washington Water Supply Advisory Committee studied the scope and funding of the state's drinking water regulatory system. This report contains a set of recommendations focused on the scope and priorities of state and local drinking water programs, and proposes a plan for adequate, stable funding for drinking water regulatory activities. These recommendations are based on a set of principles developed by the committee.[1]

This is not the first such review by the department's primary drinking water stakeholder group. Similar recommendations were made by the Drinking Water 2000 Task Force in 1995, and by the Water Supply Advisory Committee in a 1996 report to the Legislature. Both efforts were consistent in their key recommendations: the state should retain "primacy," or the responsibility for carrying out the Safe Drinking Water Act in Washington, and should change its existing funding structure. The funding recommendations included revising the Operating Permit Fee authorized in WAC 246-292 and seeking a dedicated portion of the state's Utility Tax, a tax charged to selected water systems and other utilities operating in Washington.

Although the Legislature enacted some of the non-monetary recommendations out of these efforts, the funding recommendations have either not been approved by the Office of Financial Management, or have not passed the Legislature. The most recent effort was in 1998 when legislation requested by the Department of Health, including proposed changes to operating permits, was not passed.

Key Recommendations[2]

Increase funding for state and local drinking water programs

The recommendations from this effort include sufficient funding for increased activities by local health jurisdictions, principally for work associated with the regulation of the more than 12,000 Group B water systems, and for the state Department of Health for work associated with implementing the 1996 amendments to the federal Safe Drinking Water Act. The recommended funding components include:

- An immediate increase of $3.8 million annually to the Department of Health and local health jurisdictions. These increases are proposed to be funded by:
  - Consolidating several fees for service into a revised annual operating permit fee schedule, which was enacted in statute in 1991.
  - Dedicating a portion of the existing state water distribution tax to support the state's drinking water regulatory system. These proceeds currently go into the state General Fund.
- An additional increase of approximately $2 million for DOH within 2-4 years.

[1] See Appendix 1: *Water Supply Advisory Committee Principles*
[2] See Complete Recommendations, Page 6

Modify Group B requirements

- Continue to require review and approval of all new and expanding systems.
- For 2-4 connections systems, after approval, only provide guidance and respond to complaints on health issues.
- Continue to fully regulate water systems designed to serve five or more connections.

Address the unique needs of small Group A systems

- Recognize and address the special needs of small systems in developing and implementing all division functions, using specific ideas and guidance developed by the committee.
- Enhance and expand communication, training, outreach and technical assistance to small Group A systems through the Department of Health, local health jurisdictions and third parties.

Prioritize efforts to meet federal primacy obligations

- Continue to do what is necessary to meet federal primacy obligations and maintain federal funding.
- Use committee guidance to prioritize implementation of existing and new Safe Drinking Water Act requirements.

Prioritize and enhance communication to achieve compliance

- Use committee guidance to prioritize compliance activities.
- Improve and increase efforts to educate system managers and customers about requirements.
- Expand passive enforcement processes and create new ones.

Change direction to reflect priorities and new ways of doing business

- Reallocate existing resources to reflect refined priorities and obtain efficiencies by finding new ways of doing business.
- Enhance communication, training and technical assistance for all size systems, targeting the special needs of each type.
- Enhance interactions with those directly and indirectly involved in water system regulation. Strengthen relationships with other agencies involved in water. Look for opportunities to interact with parties involved in the transfer of property, land use decisions, business licensing and others.
- Use a variety of means to build support among water system decision-makers and consumers for initiatives that ensure safe, reliable drinking water.

Why was this review necessary? What is the problem?

Lack of basic health protection

- Many small and rural systems struggle to provide basic health protection to consumers, who as the result face increased risk of illness from unsafe drinking water.
- State and local governments are falling farther behind in overseeing and addressing basic public health issues associated with public water systems. For example, last year's review by the Department of Health of systems serving temporary worker housing showed many public water systems failing to meeting basic health standards, and many that were not even properly approved as public water systems.
- Critical areas to which few resources are currently dedicated include oversight of small systems serving schools, childcare centers and other public facilities, and how known risks of contaminants with significant occurrences throughout Washington, such as nitrates and arsenic, are addressed.

Huge increase in federal requirements

Recent changes to the federal Safe Drinking Water Act, resulting in a rapidly escalating increase in federal regulations, are driving the need for new resources and new ways of doing business. During the year 2000 alone, the Department of Health must address at least a dozen new sets of extensive programmatic implementation issues, with more in the years to follow. Examples include:

- New proposed arsenic standards will increase dramatically the number of public water systems that must take action. This will require substantial Department of Health oversight, such as in additional water system plan reviews, treatment plant inspections and compliance activities.
- New proposed requirement for systems served by ground water will almost double the frequency of on-site sanitary surveys required for these systems. Furthermore, the increased complexity of the requirements will at least double the amount of time staff must spend on each survey and necessary follow up.

These new requirements are in addition to state's inability to completely and successfully implement existing federal requirements.

Economic vitality impeded by water issues

Increasing water system compliance issues have far reaching impacts in Washington communities. For example, water systems out of compliance can impede a community's economic development efforts and prevent people from being able obtain bank loans to purchase homes. This is of particular concern among small Group A water system owners and operators, who have difficulty understanding and keeping up with new requirements.

Complete Committee Recommendations

The Water Supply Advisory Committee, with the help of a special subcommittee, reviewed and made recommendations in five key areas[3]:

- Defining and overseeing Group B water systems
- Addressing the needs of small Group A systems
- Implementing the Safe Drinking Water Act
- Ensuring water system compliance with drinking water regulations
- Funding state and local drinking water regulatory programs

The committee originally intended to discuss water rights issues, but eventually dropped the topic from this review effort due to a general feeling of inability to create progress in this arena. This does not, however, negate the need for positive progress on addressing the state's substantial water rights issues, which have a direct impact on the public water system regulatory system.

The committee made more than 100 individual recommendations on the five specific areas noted above, as well as developing "general direction" recommendations that apply across the drinking water regulatory system.

Many of the recommendations describing program prioritization and redirection can be accomplished with no financial or statutory impact. The committee recommends the Department of Health use this work as guidance in program development.

For those with statutory or financial implications, the committee recommends the Department of Health request budget and legislative changes during the 2001 Legislative session.

The following pages describe the committee's complete recommendations.

[3] See Appendix 2: *Scope and Funding Subcommittee Process*

General Direction

The following recommendations apply across the state and local drinking water regulatory system:

- Change how systems are regulated. Retain primacy under the federal Safe Drinking Water Act, and retain Group B partnerships between the Department of Health and local health jurisdictions. Change funding for activities and functions, however, to reflect refined priorities, obtain efficiencies, or find different ways of doing business.
- Enhance interactions with all parties directly involved in the regulation of water systems, such as other state agencies, local health jurisdictions, various water system officials, satellite management agencies, water system service providers and consumers.
- Look for opportunities to interact with parties involved in the sale and transfer of property, business licensing and support, land use decisions, and others who have an interest making sure water is delivered safely and reliably.
- Build grassroots knowledge and support among system decision-makers and system customers to leverage participation and resources in assuring safe and reliable drinking water.
- Use the full array of communication and information exchange opportunities available, such as the Internet and other electronic communications, mass media communications, expanded training opportunities and working with third parties.
- Recognize the differences and unique needs of different types and sizes of systems, such as between small and large systems and community and non-community systems, when developing and implementing programs and compliance strategies.[4]
- Enhance training, education and technical assistance opportunities for all size systems, targeting the special needs of each type. Systems must understand regulations if they are expected to comply with them, must be capable of completing needed functions, and should be notified if they fail to complete needed functions.
- Build the financial and personnel capability at the local and state level to respond to emerging health issues, such as the Department of Health's recent work with water systems serving temporary farm worker housing.

[4] See Appendix 3: *Priorities for Small and Large Water System Activities*

Defining and Overseeing Group B Water Systems

Assuring safe, reliable drinking water from all public water systems should remain a priority of the Department of Health. Washington, however, has more than 12,000 known Group B systems: those with 2-14 connections falling below the federal definition of a public water system. State and/or local health jurisdictions will never have the resources necessary to fully regulate every water system with two or more connections in the manner currently envisioned in law. In considering the proper role for government in overseeing Group B water systems, the committee recommends the following:

- All new water systems, as currently defined in state law, should continue to undergo a regulatory review process to ensure proper siting, construction and installation of a safe and reliable drinking water supply.
- The state Department of Health should pursue enhancing the requirements for establishing new public water systems, to ensure they are properly operated and maintained into the future. This includes heightening the emphasis that proposals for new water supplies be directed first toward existing, well-operated water systems. If a new system is indeed necessary, clear steps must be taken to formally document ownership and operating responsibilities with a competent and qualified water system operator.
- The state Department of Health should maintain and enhance partnerships with local health jurisdictions in regulating Group B water systems. The local health jurisdictions should retain the option of increased regulation of these systems, beyond state requirements, as a way to address local issues and concerns.
- Once established as adequate water systems, the state Department of Health should not expend resources in the on-going oversight of operation and maintenance of Group B water systems designed to serve four or fewer connections. State activities on these systems, after they are established, should be limited to response on clear public health threats.
- For Group B systems designated to serve five or more connections, the state should retain a full range of on-going regulatory oversight. This oversight should be focused on public health priorities. Requirements and methods of public notification for public health concerns should be established for these systems. Secondary water quality requirements for these systems should no longer be mandated by the state.
- The Department of Health should heighten its efforts to inform customers of these very small water systems on significant public health issues associated with safe drinking water, and inform water users of activities they can pursue to take responsibility for their own water system. These heightened efforts may include a variety of public information activities.
- Encourage implementation at the local health jurisdiction level of priority of service models that discourage the creation of new systems when existing systems could provide service.

Addressing the Needs of Small Group A Systems

Small water systems comprise an overwhelming majority of water systems in Washington State. In fact, more than 90 percent of Washington's Group A public water systems serve less than 500 connections. This is due to several factors, principally the rural nature of much of the state.

Particularly challenging are the smallest Group A water systems: those with 15-100 connections, which are subject to the federal Safe Drinking Water Act. Their size, typical ownership and operation, unique needs and sheer numbers in Washington create a small system phenomenon requiring special attention.

In considering the approach in regulating small water systems, the committee recommends the following:

- Recognize and understand the special needs of small systems in developing and implementing all division functions.[5]
- Expand current level of Department of Health and third-party communication, education, training, technical assistance and information sharing efforts.
- Establish a technology transfer program to connect water system expertise and mentoring with system owners and operators who need it.
- Dedicate the full 2 percent State Revolving Fund set-aside funds available to small system initiatives.
- Enhance existing and develop new programs that assist small system operators, managers and decision-makers in developing system technical, managerial and financial capacity.
- Transition the existing Department of Health Small Water System Advisory Committee into a new subcommittee of the full Water Supply Advisory Committee.

[5] See Appendix 3: *Priorities for Small and Large Water System Activities*

Implementing the Safe Drinking Water Act

The Department of Health assures safe, reliable drinking water for the citizens of Washington by overseeing the state's public water systems. It has been directed by the state Legislature to implement the federal Safe Drinking Water Act in Washington, pursuant to its primacy agreement with the Environmental Protection Agency. In that role, the department is responsible for promulgating and implementing state regulations that are no less stringent than federal requirements adopted as rules by EPA, and otherwise ensuring the federal SDWA is properly administered in Washington.

This is no small undertaking in Washington. As noted earlier, the vast majority of Washington water systems serve less than 500 connections. The federal SDWA applies to Group A public water systems serving 15 or more connections. In Washington, this regulatory range includes everything from a small mobile home park serving 20 homes, to small, rural Washington communities with 100 connections, to Seattle Public Utilities, which provide water to more than 1.3 million people.

In implementing the SDWA, the committee recommends the following:

- Continue to meet primacy obligations under the SDWA, including adopting several new or modified regulations within the next 12 to 24 months. Do what is necessary to continue to hold primacy and to receive federal funding, including but not limited to expanding overall data capability and coordinating with other regulating parties, such as EPA and the state Department of Ecology.
- Due to the shortfall of available resources to fully implement all new and existing SDWA rules, implement the rules on a prioritized basis with corresponding levels of effort.[6] This will require expanding efforts in some areas and reducing current efforts in others.

[6] See Appendix 4: *Safe Drinking Water Act Priorities and Level of Effort*

Ensuring Water System Compliance

An effective compliance effort should inform water systems of applicable requirements, notify systems if they are out of compliance and instruct them on how to regain it, and ensure they are capable of resolving their problems.

In reviewing the Department of Health's approach to compliance, the committee recommends the following:

- Incorporate Safe Drinking Water Act prioritization and level of effort recommendations into department compliance efforts.[7]
- Increase and improve efforts in notifying and educating water system officials and customers about requirements.
- Increase the number of letters of non-compliance.
- Increase the use of compliance agreements.
- Expand passive enforcement processes, such as requiring more thorough water quality information on real estate disclosure forms.
- Provide economic incentives to comply with regulations, such as penalizing non-compliant systems through increased operating permit fees or additional charges for multiple reviews and repeat sanitary survey site visits.
- Use existing tools, such as consumer confidence reports and public notification, and develop new ones to empower customers and involve grassroots organizations in making sure their water systems are in compliance.

[7] See Appendix 4: *Safe Drinking Water Act Priorities and Level of Effort*

Funding Drinking Water Regulatory Programs

Without adequate and stable funding for state and local drinking water efforts, the state's public health system is increasingly limited in its ability to assure safe, reliable drinking water for the citizens of Washington. Although the state Legislature has approved some statutory changes as the result of past stakeholder efforts, it has not provided any major funding for state and local drinking water programs.

The state drinking water regulatory system needs consistent, stable funding to assure its long-term viability. Funding also should reflect a healthier balance between federal funding to meet federal mandates and state funding to address state public health priorities. To achieve this balance, the committee recommends the following funding initiatives: [8]

- An immediate increase of $3.8 million annually to the state and local drinking water regulatory system. This would include funding for an additional 19 FTEs within the state Department of Health for technical assistance, outreach and other work related to the Safe Drinking Water Act. It would also provide $1.4 million to local health jurisdictions to support a full regulatory program for approximately 6,000 Group B water systems with five or more connections. This funding increase should be accomplished by:
  - Consolidate several fees for service into a revised annual operating permit fee schedule.
  - Dedicate a portion of the state water distribution tax to support the state's drinking water regulatory system. This tax currently goes into the state General Fund.
- An additional increase of approximately $2 million for the Department of Health within 2-4 years to continue to successfully implement new rules and requirements.
- Continue using federal Drinking Water State Revolving Fund to supplement state and local drinking water oversight efforts.

[8] See Appendix 5: *Funding Options*

Appendices

1. Water Supply Advisory Committee Principles
2. Scope and Funding Subcommittee Process
3. Small and Large Water System Priorities
4. Safe Drinking Water Act Priorities and Level of Effort
5. Funding Options

Appendix 1

Water Supply Advisory Committee Principles

Water Supply Advisory Committee Drinking Water Principles

The state of Washington needs to deliver appropriate services to people in the state in order to ensure safe and reliable supplies of water. State, federal and local public health jurisdictions, including tribal governments, public water systems (PWSs) and their consumers, share the responsibility for promoting and protecting the health of their communities. The following are basic principles that will guide how a comprehensive drinking water program should function.

Public Health Protection

All consumers of drinking water from PWSs should be assured of safe, reliable and affordable drinking water meeting basic public health protection standards. These standards, and the degree of regulation, are articulated in State Board of Health policies and the Public Health Improvement Plan (PHIP). The degree of regulation required may be different depending on the type and size of the system. The degree of regulation applicable to Group A and Group B systems should be made clear to the consumer at the time of the sale of property, through mechanisms such as mandatory disclosure statements or appropriate wording on property title documents.

The protection of public health through an effective statewide drinking water program is a fundamental responsibility of state and local government. The state should provide the resources and comprehensive funding mechanism necessary to develop and maintain the capacity to protect public health and retain primacy for implementing the Safe Drinking Water Act (SDWA).

In allocating resources to drinking water program activities**,** prioritization should be made based on public health risk and cost-effectiveness. In evaluating the severity of public health risk the following factors should be considered:

- Degree of Hazard;
- Populations at Risk;
- Need for Intervention; and,
- Maximizing of Health Benefits.

Functions of the Department of Health and Local Jurisdictions

All levels of government have a collaborative responsibility for protecting public health through an effective drinking water program. Responsibilities for the program shall be carried out according to principles and standards identified in the PHIP.

The Department of Health (DOH) should develop a long-range strategic plan, as well as time-limited and measurable program objectives and performance standards. Information should be collected and analyzed in order to evaluate the effectiveness of program activities in reducing risk and improving health status, and to determine whether the program is achieving its stated objectives. Local jurisdictions should be encouraged to participate in the development of the plan, and to integrate their program activities into it.

In developing or modifying regulatory programs, the state must weigh economic impacts on the affected regulated communities, and using its ability to be flexible within its SDWA mandates, adopt programs that are the least burdensome and still achieve public health objectives.

Management of costs should be factored into any arrangements for delivery of services, with a preference for the least-cost method of delivery. Finally, implementation plans for regulatory requirements should include a process for evaluating whether the program is achieving its stated objectives.

The state should rely on its programs to certify the competence of professionals in the drinking water field who deliver direct services to water systems or their customers. Efforts also should focus on measures to ensure the quality of such certification programs.

State and local health jurisdictions (LHJs) should work to ensure that utilities are included in the PHIP process.

Governance and Delegation

DOH has primary responsibility for all PWSs, including responsibility for providing technical assistance, information, and regulation. Capacity building for the local oversight of public water supplies should be pursued in accordance with the principles of the PHIP, and the current practice of negotiated agreements (JPOs) between DOH and local jurisdictions should be continued.

It is in the best interests of consumers and utilities that regulation enforcement and program implementation occurs with state oversight, at the lowest appropriate level of government possible. The development of local jurisdictions' ability to administer drinking water regulations should be encouraged, with the state providing adequate funding and sufficient direction to ensure that programs are consistent statewide. The state should provide consultation and technical and financial assistance to those who carry out public health functions at other levels of government.

Delegation and shifting of functions should be phased in and coordinated with other state activities, such as PHIP and regulatory reform. Routine audits should be conducted to ensure that the state program is being properly implemented when it is delegated. Where necessary, the state must be ready to re-assume delegated activities.

Delegation must not result in a decreased level of public health protection, nor in conflict or inconsistent application of regulations. It should not be used to shift problems from one level of government to another level.

Third party providers should be used where services can be provided more cost-effectively than by state or local government. In this context, "cost-effective" includes the concepts of timely delivery and appropriate quality assurance functions.

Both the regulated community and the general public must have a clear understanding of who has regulatory authority and responsibility for delegated functions. The responsibility for program implementation must be linked with the authority to make decisions.

Overlapping responsibilities between agencies should be coordinated so that the various requirements are clear to the applicants, are met prior to granting of final approval, and agency approvals occur in reasonable order. For this to occur:

- State and local government should address water supply availability in their land use planning;
- A mechanism needs to be put in place to address interim needs in order to complete a successful regional water resource plan;
- Local governments are responsible for providing land use applicants with state and local water system requirements, and assuring compliance prior to land use approval; and

- As increasing demands are made on our water resources, applicants will have to assist state and local governments in ensuring that adequate data is available, so that an informed decision on water availability can be made.

Data Management/Sharing

Water quality information, including standardized reports of critical indicators, should be accurate, accessible, useful, and easily understandable. The information should be readily usable by decision-makers at the state and local levels, and by purveyors and consumers, to effectively address public health needs and water resource requirements.

To be effective, all public health jurisdictions must have access to and use an electronic information management system. This system must have the capability for the collection and analysis of administrative, demographic, epidemiological and service utilization data, as well as other data sets as necessary, to enable planning, administration, evaluation and education for public health protection.

The state must maintain an information management system with up-to-date and accurate information, with adequate retention to provide historical trends on water quality and system performance meeting both state and local needs. The system should be able to link and share water quality data with local and statewide databases in both the public and private sectors.

The state should ensure a high standard of data collection, analysis, dissemination and risk communication, by promoting partnerships and providing leadership, coordination, consultation, and technical assistance.

A basic element of the Water Quality Monitoring Program should be to ensure the validity and quality of the data used to evaluate and assess the degree of public health risk.

The monitoring data collected by the state is a valuable resource that should be actively exploited for its potential to protect public health and provide an economic benefit through easing water systems' monitoring responsibilities.

Cooperation and sharing of information between water systems should be encouraged.

Program Funding

The finance and governance structure must:

- Provide for stable, equitable revenue sources.
- Include proportionate financing responsibilities among state and local governments for those public health functions that must be universally and equitably available statewide.
- Hold all publicly funded agencies and organizations accountable for the allocation and use of resources.
- Link the responsibility for financing with the authority for decision-making.
- Support core functions of assessment, policy development and assurance.
- Encourage partnerships with other agencies, tribal governments and organizations that affect delivery of public health and related services.

The need for funding must be well documented, analyzed and defensible.

Services that benefit all public water systems and the general public should be funded through a mechanism that is equitable and not related to a specific service provided.

Public (non-fee) funds should support program capacity to the maximum extent practical. Examples include: federal funds, state and local general fund, dedicated utility tax, PHIP funds, and other appropriate public funding sources.

The basis for fees charged to systems should be clearly defined, fair, and allocated rationally and equitably.

Fees should be based on a combination of the following principles:

- All water systems pay on an equitable basis to support program capacity (services that benefit all).
- Systems pay based on the services they actually use. Although this may result in a higher per-connection charge for smaller systems, this is consistent with other operating principles and recognizes real demand for services.
- The level of support for both program capacity and program services should be based on an evaluation of the costs of providing those services.

If a responsibility is delegated to either a local government or a third party, funding that the state is spending on providing the service (minus oversight) should also be transferred to the entity providing the service. If the services are beyond those provided by the state, the provider is responsible for securing funding.

Water System Funding

Significant new state resources should be made available to assist water systems in meeting new capital needs. This includes resources to ensure the prompt availability of the state's share of any federal funding that may become available under the State Revolving Fund (SRF) or other programs. If funding through SRF is either inadequate or not available in a timely fashion, a legislative proposal authorizing statewide bonds for identified water system capital needs should be developed and submitted to the people of the state for approval.

State funding programs should provide assistance in a manner consistent with DOH objectives for achieving long-term financially responsible and well-managed systems (viability), preventing the proliferation of new nonviable systems, and financing restructuring activities by satellite managers and others.

The provision of financial assistance should be linked to efforts to have systems operate in compliance with relevant regulatory requirements, recognizing that such financial assistance will focus on public health, but may not be adequate to meet all SDWA requirements.

A state or local mechanism should be developed to provide a source of capital funding for water systems in those counties that have accepted delegation of program functions from DOH, in order to facilitate development of local solutions to water system problems. It should be based on the local jurisdiction's evaluation of system needs.

The state should promote passage of a federally funded program to assist water systems. Development of the financial assistance program for water systems should be shared with Environmental Protection Agency (EPA), and assistance conditioned upon a system's meeting financial viability requirements.

If SRF or statewide bond funds become available, privately-owned water systems should be eligible to receive funding or financial assistance for the benefit of consumers, and means to do this within the state's legal framework should be explored.

Funding priorities should be developed with the assistance of the Water Supply Advisory Committee (WSAC), with emphasis on providing safe and reliable supplies.

All alternative forms of providing financial assistance to water systems should be explored.

The legislature should give special attention to the capital improvement challenges facing small communities, of which drinking water infrastructure is but one.

Technical Investigations

Sanitary Surveys should be a fundamental vehicle to evaluate water system performance, assess public health needs, and determine appropriate corrective or compliance measures. Surveys need to be conducted on a routine basis for all systems, and the Sanitary Surveys should incorporate to the degree appropriate an element of operator training and education.

Special Purpose Investigations should be undertaken when there is a recognized potential threat to public health.

The state's program should focus on systems with the largest populations. Smaller systems should be surveyed by LHJs or third parties with DOH's role being to ensure that those performing the surveys are properly trained and that information from such surveys is used to improve system performance. DOH should work with local jurisdictions and third parties to perform Sanitary Surveys when such partnerships are cost-effective and efficient.

Compliance

In carrying out the public drinking water program, it is the role of the responsible authority to develop and implement techniques for bringing all systems into compliance. These techniques must include clear communication of requirements to the public water systems to assist them in fulfilling their responsibility in complying with the regulations.

A compliance program for water systems should include the following components:

- Balance between enforcement activities for violations that are preventive in nature (i.e., source protection, water system plan review) and those that are remedial (i.e., MCL violations);
- Enforcement actions tailored for out-of-compliance water systems based on actions that have proven most effective for similar types of systems/ownership;
- Informal enforcement techniques that penalize non-compliant systems; (Adequacy, SPI)
- A comprehensive system of financial incentives and penalties/disincentives to compliment informal enforcement techniques; (SRF Eligibility)
- Enforcement actions commensurate with the severity of the violation, and increase for subsequent violations;
- In cases where more stringent local regulations exist, compliance activities directed toward meeting local regulations; ("Support Locals") and
- After a system has been notified of its violation, further compliance efforts focused on using informal tools and educational methods. However, formal compliance tools should be used when it is determined that public health is threatened or in those situations where informal tools have been used without success.

Prevention should be balanced with remediation in assuring drinking water quality:

- Remediation of significant health and safety problems already identified should take priority over prevention.

- When remediation is required, the responsible health authority should coordinate with other agencies (LHJs, UTC) to ensure that solutions are sustainable and environmentally compatible.
- Source protection should be supported as a preferred water protection strategy, to the maximum extent practical.
- Prevention efforts should be evaluated at a level that balances reduction in future remediation with current prevention costs.
- Long-term future prevention efforts should be funded at a level to reduce future remediation costs.

Compliance efforts should be prioritized based on type of violation first, and then on population affected.

The responsible authority should use incentives (such as variable plan review process/fees) to encourage Group A and B systems to achieve and maintain compliance and viability.

Planning

Planning efforts should:

1. Ensure that federal, state and local regulatory mandates are met in a manner that:
    - Protects public health;
    - Assures reliability in the system and source;
    - Utilizes a preventive approach; and,
    - Drives for clarity in state and local regulatory roles and responsibilities.
2. Be designed and integrated to be useful to the operation and management of water systems, with emphasis on public health:
    - Planning decisions should be updated periodically in light of new information;
    - Planning processes, decisions, and data collected should be useful to the water system to which it applies;
    - Greater emphasis should be placed on protecting public health;
    - SDWA implementation should be addressed;
    - Planning requirements should be integrated with state and local land-use planning requirements, so that as water system plans are developed they are consistent with those requirements;
    - There should be certainty for water systems regarding water availability; and
    - There should be recognition that regional planning is necessary to resolve value conflict.
3. Coordinate with other state and local agencies to assure:
    - Consistency in decisions among regulatory agencies on growth management, water resource availability and approval of individual and regional water system plans in the local planning context;
    - Clarity in roles and responsibilities among state and local agencies, with inclusion of tribal and foreign government treaty holders as applicable, so that consistency and clarity in timely decision-making can be achieved; and
    - Coordination focused through a regional planning process.

4. Collect and disseminate information in a format that is easily understandable, to inform and assist decision-makers in a way that:
    - Permits them to assess whether planning is an effective management tool;
    - Continually revises and upgrades information in a timely manner;
    - Compliance with water quality measures can be determined; and
    - Is fed into the decision process and permits decisions to be continually evaluated and revised as necessary.
5. Provide assistance to purveyors and users in a way that takes into account and is sensitive to differences in end-user needs, and is clear, straightforward, practical, and implementable.
6. Focus on the prevention of non-viable systems.
7. Planning should be encouraged through positive incentives.

Public Education and Training

Many water quality problems can be prevented by educating water purveyors and ensuring that they are properly trained and knowledgeable about the potential for health risks associated with their systems.

All opportunities that arise during routine program implementation (Sanitary Surveys, etc.) should be used to provide technical assistance and training to water system purveyors and operators. This is especially useful for small water systems.

Methods to inform and educate the public about drinking water quality and its implications for public health must be developed. These should include methods for providing education to small communities without organized water system ownership regarding how to organize, secure grants and/or loans, and acquire the system(s).

Training and Smaller Water Systems

Smaller water systems have unique characteristics that require tailored methods of assistance in order to reduce risk to human health from contamination of the drinking water they serve.

Smaller water systems would benefit from training to assist them with:

- Achieving Compliance (Remediation);
- Remaining in Compliance; and
- Restructuring/Consolidation.

The Initiator/Standard Setter for this assistance should be DOH. Providers of training can come from a variety of sources including the private sector.

Major areas of training should include, but not be limited to:

- Education/Awareness
    - Purveyor/Operator Level
    - Consumer Level (*Caveat Emptor)*
- Compliance Assistance
- Financial Assistance
- Alternative Technologies
- Best Available/Affordable Technologies

Appendix 2

Scope and Funding Subcommittee Process

At the request of the Department of Health, Division of Drinking Water, the Water Supply Advisory Committee in July 1999 convened a subcommittee to study and make recommendations on the scope and funding of the state's drinking water regulatory system. The subcommittee met nine times, roughly monthly, during the period July 1999 to March 2000. The full Water Supply Advisory Committee endorsed the subcommittee's recommendations at its quarterly meeting on April 20, 2000.

Scope and Funding Subcommittee Meeting Summary	
July 6, 1999	Adopting subcommittee purpose and objectives
September 8, 1999	Defining and overseeing Group B water systems
October 19, 1999	Defining and overseeing Group B water systems
November 16, 1999	Setting priorities and implementing the Safe Drinking Water Act
December 15, 1999	Setting priorities and implementing the Safe Drinking Water Act
January 6, 2000	Addressing the needs of small Group A water systems
February 2, 2000	Ensuring water system compliance with drinking water regulations
March 1, 2000	Funding state and local drinking water regulatory programs
March 29, 2000	Funding state and local drinking water regulatory programs

Appendix 3

Small and Large Water System Priorities

Prioritized Efforts for Small Systems *(Typically voluntary staff)*		**Prioritized Efforts for Large System** *(Typically professional staff)*	
Rank	**Activity**	**Rank**	**Activity**
1	"Step-by-step" how to operate system	1	Timely plan/project approval
2	Health/third party personnel in field	1	Quick interpretations
3	Active, consistent enforcement, with education	2	Encourage self regulation
4	Operator certification training	3	Lab certification
5	Buddy system/mentoring	4	External communication
6	Clear description of requirements	5	Interact with EPA
7	Improve Health communication/focus	5	Interact with Ecology on water rights
8	Interaction/coordination with local health jurisdictions	6	Financial incentives
9	Agreements with agencies/stakeholders	7	React to EPA regulations prior to them taking affect
10	Quick plan review	8	Buddy system/mentor program
10	Interaction with Ecology on water rights	9	Educate medical community
11	Engage financial/lending institutions	10	Active enforcement, quick notice and hammer
12	Information regarding alternative fixes	10	System operation review
13	Engage, educate medical community		
14	Off-site training		
15	Annual personal phone call		

Appendix 4

Safe Drinking Water Act Priorities and Level of Effort

SDWA Rule/Programs	Importance / Priority				Level of Effort			
	H (3pts)	M (2pts)	L (1 pt)	Total Points	H (3pts)	M (2pts)	L (1pt)	Total Points
"High"								
Operator Certification	10	2	0	**34**	10	2	0	**34**
Source Water	9	2	1	**32**	9	3	0	**33**
Coliform	9	3	0	**33**	6	6	0	**30**
Capacity	8	3	1	**31**	4	6	2	**26**
Surface Water Treatment rule (current)	8	2	2	**30**	4	4	4	**24**
Sanitary Surveys	6	6	0	**30**	6	5	1	**29**
Lab Certification	7	4	1	**30**	4	8	0	**28**
"Medium"								
GWI	5	6	1	**28**	1	9	2	**23**
Surface Water Treatment rule (future)	5	5	2	**27**	5	6	1	**28**
Nitrate	5	4	3	**26**	3	6	3	**24**
Plan Review	2	8	2	**24**	3	8	1	**26**
Public Notification	1	8	3	**22**	3	3	6	**21**
Ground Water Rule	2	6	4	**22**	9	2	1	**32**
Disinfection/DBP	2	6	4	**22**	5	4	3	**26**
Class V UIC	0	8	4	**20**	0	2	10	**14**
Lead/Copper	0	8	4	**20**	1	4	7	**18**
Trihaolmethanes	1	6	5	**20**	1	5	6	**19**
"Low"								
Arsenic	1	5	6	**19**	2	4	6	**20**
Phase 2/5	1	5	6	**19**	0	10	2	**22**
Consumer Confidence Reports	1	4	7	**18**	1	3	8	**17**
Radon	1	2	9	**16**	1	5	6	**19**
Unregulated Monitoring	1	2	9	**16**	0	3	9	**15**
Information Collection Rule	0	1	11	**13**	0	0	12	**12**
Sulfate	0	0	12	**12**	0	2	10	**14**

Appendix 5

Funding Options

DDW Program Staffing Options by WSAC Recommendations

	Current						Option #1					Option #2			EPA Model			
	DOH FTE	1	Other $	2	Total $	3	DOH FTE		Other $		Total $	DOH FTE	Other $	Total $	DOH FTE		Other $	Total $
GROUP B																		
Review all new/expanding systems	2		3,630,000	4	3,824,500		2		3,630,000		3,824,500	2	3,630,000	3,824,500	2		3,630,000	3,824,500
Fully regulate systems with 5+ connections (Health)	1		363,000		460,250		2		1,724,250	9	1,918,750	4	1,724,250	2,113,250	1		363,000	460,250
2-4 systems, only guidance & respond to health threat complaints	1		544,500		641,750		1		544,500		641,750	1	544,500	641,750	1		544,500	641,750
Emphasize PWSs' public info activities							1				97,250	1		97,250				
SDWA PRIORITIES																		
Recognize implementation timing/effort priorities for NEW SDWA regulations	4				389,000		8				778,000	15		1,458,750	137	14		13,323,250
Recognize implementation timing/effort priorities for EXISTING SDWA regulations	60	5			5,786,375		64				6,224,000	67		6,515,750	96	15		9,336,000
SMALL WATER SYSTEM (SWS) FOCUS																***16***		
Expand communication, education, training, TA, info sharing	3		311,000	6	602,750		8		311,000		1,089,000	10	311,000	1,283,500				
Assist SWS to develop & maintain Capacity	3		200,000	7	491,750		4		200,000		589,000	4	200,000	589,000				
COMPLIANCE																***16***		
Notify/educate PWSs about requirements	3				291,750		3	10	500,000	11	791,750	3	500,000	791,750				
Increase use of formal enforcement tools	4				389,000		5				486,250	8		778,000				
Increase use of passive enforcement tools	2				194,500		2				194,500	3		291,750				
Engage customers in achieving compliance	1				97,250		1				97,250	3		291,750				
GENERAL PROGRAM DIRECTION																		
Respond to emergencies & emergent issues	3				291,750		4				389,000	4		389,000				
REST OF PROGRAM	18	8			1,701,875		20	12			1,896,375	20		1,896,375	18			1,701,875
Info Mgmt Enhancement Project	3		500,000		791,750		1		600,000	13	697,250	1		97,250				
TOTAL	**107**		**5,548,500**		**15,954,250**		**126**		**7,509,750**		**19,714,625**	**146**	**6,909,750**	**21,059,625**	**255**		**4,537,500**	**29,287,625**

ASSUMPTIONS:
1 - FTEs are DW staff's best estimate based upon their knowledge of the DW program
2 - Includes cost for LHJ FTEs ($90,750/yr) plus DOH contract $
3 - Annual cost for DOH FTE = $97,250 (average EE3 & PHA3); includes salary, benefits, goods & services, travel, equipment and DOH indirect charges
4 - 50 FTEs in LHJs distributed: 40 review new systems, 4 regulate 5+ connection, 6 respond to 2-4 connection issues
5 - 1/2 of FTEs in '96 WSAC report (85/2) + 24 new FTEs since '96 less FTEs in Compliance - Notify PWSs and Use Formal Enforcement
6 - ERW Circuit Rider, Small Community Initiative
7 - Capacity Development Grants
8 - Rest of Program includes: Planning, Legislation, Water Resources, Reuse/Conservation, DW Program Administration
9 - Includes increase to 15 FTEs in LHJs
10- Increase included in SDWA implementation and Communication w/SWS
11- Current year for data project; move in future to notify/educate PWSs
12- Increases are 1 FTE for Governor's Water Strategy; 1 FTE for Planning activities
13- Current shortfall for Info Mgmt project funding
14- Includes part of SWTR, SRF, Op Cert, training, CCR, Div Mgmt, Admin Support, Data Entry, Plan Review; all of DBP, Radon, GW, Capacity, Enforcement
15- Includes part of SWTR, SRF, Op Cert, Training, CCR Div Mgmt, Admin Support, Data Entry, Plan review; all of Pb/Cu, Phase ii/v, TCR, SWAP, Cross Connection, Lab Cert, Data system Development, Sanitary Survey
16- Included in NEW SDWA implementation

DDW Program Staffing Options by Core Functions

Core Functions	Current			Option #1			Option #2			EPA Model		
	DOH FTE	Other $	Total $	DOH FTE	Other $	Total $	DOH FTE	Other $	Total $	DOH FTE	Other $	Total $
Administrative Support	8		787,725	9		889,838	10		987,088	25		2,436,113
Assurance (Notification/ Enforcement)	17	479,300	2,154,431	20	1,618,300	3,602,200	27	1,618,300	4,278,088	29	399,300	3,229,275
Communications	17	668,850	2,290,494	23	1,018,850	3,275,050	28	1,018,850	3,717,538	43	435,600	4,578,450
Division Mgmt	11		1,072,181	12		1,213,194	13		1,310,444	28		2,691,394
Information Management	10	500,000	1,496,813	9	650,000	1,544,700	11	50,000	1,080,850	23		2,265,925
Intergovernmental Coordination	5		483,819	6		551,894	6		551,894	4		425,469
Plan Development and Review	14	1,895,000	3,246,775	16	1,895,000	3,426,688	17	1,895,000	3,543,388	30	1,815,000	4,688,738
Regulatory Authority	8		787,725	9		889,838	10		987,088	25		2,436,113
Technical Assistance/Sanitary Survey	17	2,005,350	3,634,288	21	2,327,600	4,321,225	23	2,327,600	4,603,250	48	1,887,600	6,536,150
TOTAL	**107**	**5,548,500**	**15,954,250**	**126**	**7,509,750**	**19,714,625**	**146**	**6,909,750**	**21,059,625**	**255**	**4,537,500**	**29,287,625**